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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/721,736

11/26/2003

Yong Hee Kim

K-0571

3955

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7590

02/20/2007

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EXAMINER

PATEL, RITA RAMESH

ART UNIT

PAPER NUMBER

1746

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/721,736

Applicant(s)

KIM, YONG HEE

Examiner

Rita R. Patel

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Response to Applicant's Arguments / Amendments***

This Office Action is responsive to the amendment filed on 11/24/06. Claims 7-19 have been added. Claims 1 and 3-19 are pending. Claims 1 and 3-6 have been amended. Applicant's arguments have been considered, but are not persuasive. Thus, claims 1 and 3-19 are finally rejected for the reasons of record.

35 USC 112 first paragraph and second paragraph rejections over claim 6 have been overcome due to applicant's amendments filed 11/14/06.

Re 35 USC 102(e) rejection over claim 1, applicant contests that the Elick reference neither disclose nor suggests the features "wherein the at least one cleaning nozzle is fixed to a portion of the sump proximate the filter assembly so as to be in communication with said water circulating means, and wherein the at least one cleaning nozzle is configured to spray pressurized water supplied by said water circulating means into the filter assembly". The Office finds that Elick does teach these features; nozzles 273 of Elick are located on the bottomside of lower wash arm 47, also the sump is defined by tub 5, therefore, it can be seen that the nozzles are fixed to a lower portion of the sump proximate the filter assembly (Figures 2 and 3).

Applicant argues that Elick neither discloses nor suggests that the holes 273 in the lower wash arm 47 are fixed to any portion of a sump, let alone a portion of such a sump which is proximate the filter chamber 202/fine mesh screen 207. However, in Figure 1 Elick illustrates a main housing 33 of pump assembly 30, projecting therefrom

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is an overflow tube 98 integrated into conduit 51 (through blow molding or extrusion).

Conduit 51 directs fluid from within overflow tube 98 into overflow housing 104.

Overflow housing 104 incorporates course filter 106. The cleaning nozzles 273 are fixed to the main housing (See Figure 1) which is integrally attached by its centerpoint to the base of the container 5 which defines the sump. Similarly, in Elick, the nozzles 273 located on wash arm 47 are connected to a shaft which runs from the sump through the filter body; the entirety of the shaft (upper shaft 257 and lower shaft 170) traverses through the sump cavity and is configured to hold filter body in place within the apparatus.

The Office maintains its rejections over prior dependent claims, and discloses art rejections over newly submitted claims herein.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5, 11-12, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Elick et al. herein referred to as "Elick" (Pub. No.: US 2004/0003830).

Elick teaches a dishwasher with a pump and filtration system. The filter system includes an annual strainer 36 and filter guard 39. Pump assembly 30, drain pump 79, drain hose 85, and nozzles 273 read on applicant's claim for a pressurized water circulating means and cleaning nozzles. The plurality of nozzles 273 provide many spray streams thereon the filtration system to provide cleaning. In a manner commensurate with outer wall 279, filter guard 39 has an underside 292 which curves in order to enhance the directing of wash arm spray for the back-washing of fine mesh screen 207. That is, as previously indicated, lower wash arm 47 includes at least one set of nozzles 273 for use in directing a spray to backwash and cleanse fine mesh screen 207. Filter guard 39 is spaced sufficiently from pump housing cap 235 and nozzles 273 are suitably angled to accommodate this spray upon this fine mesh screen 207. However, the curvature of underside 292 further enhances said backwashing function. Wash-out regions 280 are provided for flushing out trapped food particles in connection with the overall filter guard 39 (col. 10, lines 41-53). Also, Elick teaches a sump in operation with the apparatus (col. 9, line 63).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4, 6-10, and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elick as applied to claims above.

Nozzles 273 are juxtaposed to the filtering system 36, 39 of Elick. Although, Elick fails to teach a plurality of concentrically arranged filters, it would have been obvious to one of ordinary skill in the art at the time of the invention to have multiple concentric filters therein Elick. Elick's multiplicity of filters 36, 39 teaches that having multiple filters within a dishwasher aids in filtering out food particles, etc. that may clog the system. Multiple filters would achieve better filtering of different sized particles of objects to be filtered within Elick's filtration system. It is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 124 USPQ 378 (CCPA 1960). Also, the filter assembly of Elick is illustrated such that the cleaning nozzle is configured to spray liquid thereon.

Moreover, in providing multiple filters concentrically formed to make-up a filtering system, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the size filter holes therein such that the outer filter has the smallest holes and the innermost has the largest holes, comparatively. Thus, particles of food being filtered therein would be filtered in accordance to size, to eliminate clogging the system and achieve adequate efficient filtering for small particles.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the size of the filtering holes to achieve consistent water flow through the filtering system. Water flow/water pressure is known to be important in such a filtering process because in dishwashing apparatuses, pumps and

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sumps are used to maintain filtering and pressure flow through the system so desirable filtering is maintained, as well as, water efficiency, and optimal water flow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize such filtering holes, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). For a given amount of water pressure through a service pipe, one should select a particular size for the injection holes.

In Elick, the nozzles 273 comprise a tubular cleaning body (lower wash arm 47).. Also, the entirety of shaft 257 (upper) and driveshaft 170 (lower) read on applicant's claims for a filter holder provided in the sump, wherein the filter holder is configured to hold a filter assembly (Figures 6 and 7). The shaft traverses through the sump cavity and filter body to hold it into place within the machine. It can also be seen that the nozzles 273 of Elick are wholly capable of spraying pressurized water at the filter assembly such that particles adhered to first, second, and third filters are dislodged by the pressurized water. It is well settled that the intended use of a claimed apparatus is not germane to the issue of the patentability of the claimed structure. If the prior art structure is capable of performing the claimed use then it meets the claim. *In re Casey*, 152 USPQ 235, 238 (CCPA 1967); *In re Otto*, 136 USPA 459 (CPA 1963).

Claims 3-4, 7-10, and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elick as applied to claims 1 and 5 above, and further in view of Alabaster (US Patent No. 3,122,148).

Alabaster discloses a dishwasher with multiple filter means. Also, Alabaster teaches arranging the construction of a filtration system that while the full flow of liquid passes through a relatively coarse meshed strainer, the following proportion of the flow is by-passed through a fine mesh secondary filter. It is preferred to remove the coarser particles of soil from the partial, or by-pass, liquid stream before it enters the fine mesh strainer. This reads on applicant's claim for providing a filter assembly with multiple filters. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine such features of concentrically aligning such Alabaster filters, as shown in Figures 2 and 3, to the invention of Elick, one would achieve better filtering means by removing coarse materials by a first filter and small materials by latter filters, as found to be a common issue to be overcome in the art of filtration systems for dishwashing apparatus taught by Alabaster.

In addition, Alabaster teaches that if the mesh of the strainer is too coarse, particles that are likely to form redeposit will be left in circulation; if the mesh is sufficiently fine to remove all deleterious particles, the filter may be quickly choked and as the differential pressure rises as a result of this choking, the rate of flow will diminish with loss of washing action. Furthermore, particles may be sucked through and returned to circulation; thus reading on applicant's limitations wherein the assembly has varying sized filter holes, respectively where the outer filter of the assembly has the



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smallest holes among the varying sized holes (col. 1, lines 23-40). Although it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Elick, as described above, to teach varying sized filtering holes, in arguendo, it would have been similarly obvious to one of ordinary skill in the art at the time of the invention to combine such features of Alabaster to Elick to achieve efficient filtering means, diminish loss of washing action, reduce particles sucked through the filter and returned to circulation, and minimized choking in such a dishwashing machine.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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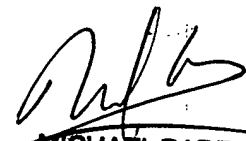
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rita R. Patel

  
**MICHAEL BARR**  
**SUPERVISORY PATENT EXAMINER**